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Preparing for the "Off" Year

Lenny Wells

With last year's very large crop, most growers are expecting an "off" year. While it is sure to be an "off" year, it should not be as bad as what we saw in 2006. Good nut quality and good leaf retention are an indication that most trees were not as stressed as they normally are late in the season with a heavy crop load.

While the heavy crop load did create some stress, our insect and disease pressure was uncharacteristically light. Dry weather adds an additional stress for dry-land orchards, but well-irrigated orchards should be ok in this respect.

I would expect 'Desirable' to come back with a decent crop. Large, old 'Stuart' trees are unlikely to come back with a crop

no matter what management practices were employed.

Bearing in mind that we are looking at an "off" year, it will be imperative, with rising fuel and fertilizer prices, to manage your crop as efficiently as possible. This will require fewer trips across the orchard and reduced fertilizer applications.

Nitrogen application is one area, particularly in the "off" year, that we should all save money on. A shorter crop requires less N. We are already probably applying too much N to most orchards. If you have a good stand of well-established clover, you can leave N completely off your fertilizer list in an "off" year. Without clover, 50 lbs N will be adequate for most well managed orchards with a short crop.

Application timing is important for N efficiency. If you spend the money on the fertilizer, you want your trees to get it. March applications are too early and likely lead to a large waste of N fertilizer under normal March weather conditions. Pecan trees use stored N exclusively for budbreak and early shoot elongation. When the shoots are about 1/3 expanded, much of the stored N will be depleted and the trees will begin taking up N from the soil with the increased demand.

With normal spring rainfall, April applications of N should be much more efficient based on how the tree uses N. Dry weather can make uptake difficult, regardless of application timing, so this must be taken into account as well.

Crop estimates should be made in May or June and determinations can then be made as to whether or not additional fertilizer is needed. The estimate of fruit set should be made as a percentage of an optimum observed in previous years. Value of this crop, based on typical price per pound, when compared to average production cost will determine if a full cultural program would be profitable.

Other ways to save money on fertilizer application include: banding fertilizer over the drip emitters, fertigation, and use of chicken litter.

One of the best ways to ensure fertilizer efficiency, is to leaf and soil sample every year. This can save an enormous amount of money. Knowing the nutritional status of your trees, allows you to know what is needed and what you do not have to apply.

Zinc is only taken up by the leaf in an efficient manner when the leaves are young and expanding. Terminate zinc sprays after the third week of May. If a second cycle of shoot growth occurs in June-July, the new growth will be susceptible to zinc deficiency. However, the deficiency will be relative minor because the second cycle is usually sparse.

Another benefit of crimson clover is that you should not mow until the clover seeds out. This saves you at least one trip over the orchard. Chem-mowing after clover re-seeds will also cut your floor management trips over the orchard by 2-3 trips.

In an "off" crop year, use insecticides only against insects that will defoliate or stress the tree. These include aphids and mites. If no nuts are there for nut-feeding insects, why spray for them? Luckily, most

of our insect problems occur later in the year, after we have the chance to assess what type of crop is there.

Fungicides should be applied in close accordance with the potential for scab development. If we are dry through the spring as we saw last year, save the sprays. You will lose money if you spray on a 14 day schedule from April-August/September in an "off" year. Some operations are large enough that they must use a strict spray schedule in order to get over the acreage in the required amount of time. Still, growers should pay close attention to rainfall events. If there is no scab pressure and no nuts, why spray?

Reducing cultural inputs during an off season has a risk other than the possibility of under estimating the crop. The risk is that the price per pound may be abnormally high, making an otherwise unprofitable crop profitable. Abnormally high prices occur if the national crop is extremely off. However, there is usually an indication by bloom time as to whether or not the national production is expected to be abnormally low.

Current fuel and fertilizer prices have changed the rules, and we can no longer be as indiscriminate with our inputs as we once were. Be efficient and be smart about where and how you use your production inputs. This may not matter as much in an "on" year, but it can be critical in the "off" year.

Winter Pruning

Lenny Wells

Last year's heavy crop took a toll on many limbs and trees. Pruning out dead and broken limbs should be one of the top priorities of the winter for many growers. The principles of pruning trees will remain the same, whether they have developed normally or suffered damage.

Phylloxera

Will Hudson

When making a cut, try to prune a damaged limb all the way back to the trunk or next adjoining limb without leaving a stub. Cuts should be made as small as possible. Make cuts just outside the limb collar so that the wound will heal properly. A proper cut should heal over with callus tissue, forming a barrier from decay.

It's always best to use the 3-cut method to prune limbs. The first cut should be made as an undercut 6-8" from the point of attachment. Cut about 1/3 of the way through the limb on this cut. Next, Move 1/2 to 1" out further on the limb and cut downward until the branch snaps out. This will remove the weight of the limb and prevent ripping or tearing of bark at the point of attachment. The final cut is made by cutting out the remaining stub back to the branch collar.

If a stub is left on the tree, the tree will attempt to "wall-off" the stub. Callus tissue will begin growing around the branch collar and the rest of the stub will decay, allowing wood rotting organisms to enter the tree and attack the main trunk.

Boron Recommendations

Lenny Wells

Three years of study have shown that the best time to apply boron sprays to enhance fruit retention and percent kernel will be in the early spring in your pre-pollination sprays. Three sprays applied every two weeks beginning when catkins are elongating should cover the critical pre-pollination period. Additional sprays beyond this period have proven ineffective at increasing fruit retention and percent kernel.

Also, as long as leaf B is within the recommended range (50-100ppm), no benefits are seen to increasing leaf B concentration.

If there were phylloxera in your orchard last year, remember that you should add an insecticide to your first (bud break) fungicide spray. The window for controlling these pests is narrow, and there is nothing that will get them once the galls form. Chlorpyrifos (Lorsban, etc.) is effective, as are aphicides, like Provado and Centric.

Scales

Will Hudson

Scale insects can cause die-back of pecan limbs and branches. Pecan may be a host of a number of scale species, but the most common is the obscure scale. Scale insects can often be overlooked. The texture and color of these insects are very similar to that of the pecan bark. The waxy covering of the female is approximately 1/16 to 1/8" in diameter, flat, dark, and circular in shape.

Infested trees will have less vigor and are more susceptible to wood-boring insects. Infested branches up to 3" in diameter may be killed. Larger branches can be weakened, which limits production. Inspect trees and limbs for sign of scale, which normally begin on the lower 1/3 of the tree and move from inside toward the terminals.

Treat scale-infested trees with a 2% dormant oil until runoff and again 10-14 days later. Dormant oils are the heaviest of the horticultural oils and are formulated for use on dormant plants only. It is best to apply dormant oils as late as possible, but before budbreak. Do not treat for scales when trees are wet and do not combine with sulfur. High volumes of spray (200 GPA) are required for thorough coverage.

When applying horticultural oils, make sure there is good agitation in the tank.

Even though you are making an application to a dormant tree, injury or tree death can occur if there is poor agitation which allows the oil and water to separate, giving the trees a higher concentration of oil.

After budbreak in the early spring, Esteem (pyriproxyfen) can be applied when the crawlers begin to emerge. Esteem is a growth regulator that has shown good results on scale.

Edited by
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DATES TO REMEMBER

Southeastern Pecan Growers Association
Annual Meeting
Biloxi Mississippi
Feb. 22-24, 2008

Georgia Pecan Growers' Annual Conference
Perry, GA
May 1, 2008

COUNTY PECAN PRODUCTION MEETINGS

Jan. 29	Tattnall/Evans Co.
Feb. 11	Crisp Co.
Feb. 14	Irwin/Ben Hill Co.
Feb. 19	Peach Co.
March 13	Dougherty/Lee Co.
March 14	Berrien/Lanier Co.
March 20	Toombs/Appling Co..

Contact your local county extension office for information on location and time of meetings.



